10. (Amended) An electrostatic chucking device manufacturing method according to any one of preceding claims 5 to 8, wherein the polyimide films which constitute the first insulation layer and the second insulation layer have a film thickness of 20 to 50 μm.

SUB B2 cancel'd. A2

11. (Amended) An electrostatic chucking device manufacturing method according to any one of preceding claims 5 to 8, wherein the low-temperature compression bonding processing is performed under the compression condition of 2 to 5 MPa in the thicknesswise direction in the atmosphere.

12. (Amended) An electrostatic chucking device manufacturing method according to any one of preceding claims 5 to 8, wherein the low-temperature compression bonding processing is performed under the compression condition of 0.1 to 5 MPa in the thicknesswise direction in the reduced-pressure atmosphere of not more than 133 Pa.

REMARKS

The above amendments to the claims have been made to correct the multiple dependency of the claims and to put the application in better condition for examination. No new matter has been added.

In the event that any fees are due in connection with this paper, please charge our Deposit Account No. 01-2300.

Respectfully submitted,

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What is claimed is:

1. An electrostatic chucking device having a laminated structure which is formed by sequentially laminating a first insulation layer, an electrode layer and a second insulation layer on a metal substrate, wherein the first insulation layer and the second insulation layer are constituted of polyimide films, and at least the adhesion between the metal substrate and the first insulation layer is performed by using a thermoplastic polyimide-based adhesive film having a film thickness of 5 to 50 μm.

2. An electrostatic chucking device according to claim 1, wherein the adhesion between the metal substrate and the first insulation layer, the adhesion between the first insulation layer and the electrode layer and the adhesion between the electrode layer and the second insulation layer are respectively performed by using thermoplastic polyimide-based adhesive films having a film thickness of 5 to 50 μm.

3. An electrostatic chucking device according to claim 1 or 2, wherein the metal substrate is made of an aluminum alloy metal substrate.

4. An electrostatic chucking device according to any one of preceding claims 1 to 3, wherein the polyimide films which constitute the first insulation layer and the second insulation layer have a film thickness of 20 to 50 μm.

5. An electrostatic chucking device manufacturing method including

a step in which a thermoplastic polyimide-based adhesive film having a film thickness of 5 to 50 μm, a polyimide film which constitutes a first insulation layer, a thermoplastic polyimide-based adhesive film having a film thickness of 5 to 50 μm, a metal foil which constitutes an electrode layer, a thermoplastic polyimide-based adhesive film having a film thickness of 5 to 50 μm and a polyimide film which constitutes a second insulation layer are sequentially superposed on a metal substrate, and

a step in which a low-temperature compression bonding processing is performed at a heating temperature of 100 to 250°C under pressure so as to form a laminated structure which is constituted by sequentially laminating the first insulation layer, the electrode layer and the second insulation layer on the metal substrate.

6. An electrostatic chucking device manufacturing method including

a step in which an electrode layer is formed on one-side surface of a first insulation layer or a second insulation layer by means of vapor deposition means or plating means,

a step in which a thermoplastic polyimide-based adhesive film having a film thickness of 5 to 50 μm, a polyimide film which constitutes the first insulation layer, a thermoplastic

polyimide-based adhesive film having a film thickness of 5 to 50 μm, the electrode layer, a thermoplastic polyimide-based adhesive film having a film thickness of 5 to 50 μm and a polyimide film which constitutes the second insulation layer are sequentially superposed on a metal substrate, and

a step in which a low-temperature compression bonding processing is performed at a heating temperature of 100 to 250°C under pressure so as to form a laminated structure which is constituted by sequentially laminating the first insulation layer, the electrode layer and the second insulation layer on the metal substrate.

7. An electrostatic chucking device manufacturing method including

a step in which a polyimide film which constitutes a first insulation layer, a thermoplastic polyimide-based adhesive film having a film thickness of 5 to 50 μm, a metal foil which constitutes an electrode layer, a thermoplastic polyimide-based adhesive film having a film thickness of 5 to 50 μm and a polyimide film which constitutes a second insulation layer are sequentially superposed,

a step in which a low-temperature compression bonding processing is performed at a heating temperature of 100 to 250°C under pressure so as to form an electrostatic chucking sheet which is constituted by sequentially laminating the first insulation layer, the electrode layer and the second insulation

layer,

a step in which the electrostatic chucking sheet is superposed on a metal substrate by way of a thermoplastic polyimide-based adhesive film having a film thickness of 5 to 50 μm, and

a step in which a low-temperature compression bonding processing is performed at a heating temperature of 100 to 250°C under pressure so as to form a laminated structure which is constituted by sequentially laminating the first insulation layer, the electrode layer and the second insulation layer on the metal substrate.

8. An electrostatic chucking device manufacturing method according to claim 7, wherein the polyimide film which constitutes the first insulation layer and the thermoplastic polyimide-based adhesive film having a film thickness of 5 to 50 μm are preliminarily integrally laminated to form a first laminated sheet, the polyimide film which constitutes the second insulation layer and the thermoplastic polyimide-based adhesive film having a film thickness of 5 to 50 μm are preliminarily integrally laminated to form a second laminated sheet, and a metal foil is inserted between respective adhesive films of the first laminated sheet and the second laminated sheet, and the first laminated sheet, the second laminated sheet and the metal foil are subjected to a low-temperature compression bonding processing under pressure at a heating temperature of 100 to

250°C so as to form the electrostatic chucking sheet.

9. An electrostatic chucking device manufacturing method according to any one of preceding claims 5 to 8, wherein the metal substrate is made of an aluminum alloy metal substrate.

~~10. An electrostatic chucking device manufacturing method~~ according to any one of preceding claims 5 to 9, wherein the polyimide films which constitute the first insulation layer and the second insulation layer have a film thickness of 20 to 50 μm.

11. An electrostatic chucking device manufacturing method according to any one of preceding claims 5 to 10, wherein the low-temperature compression bonding processing is performed under the compression condition of 2 to 5 MPa in the thicknesswise direction in the atmosphere.

12. An electrostatic chucking device manufacturing method according to any one of preceding claims 5 to 10, wherein the low-temperature compression bonding processing is performed under the compression condition of 0.1 to 5 MPa in the thicknesswise direction in the reduced-pressure atmosphere of ~~not more than 133 Pa.~~